
WAVE PARK ECONOMIC IMPACT ASSESSMENT

CITY OF MELVILLE
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EXECUTIVE SUMMARY

BACKGROUND

The City of Melville has received a proposal to develop URBNSURF Perth at Tompkins Park, Alfred Cove. The site is currently the location of the Melville Bowls Club which is being relocated within the City. To assist in its assessment of the development, an economic impact assessment is required to determine the economic and social impacts of the development on the City of Melville.

PURPOSE & APPROACH

The purpose of this report is to provide an assessment of the economic impacts of the construction and operations phases of the development. A summary of the social impacts associated with the operational phase of the project has also been developed.

PROJECT DESCRIPTION

Wave Park Group Pty Ltd has applied to develop a surf sports, recreation, and leisure facility, called URBNSURF Perth, on the Melville Bowling Club Site at Tompkins Park, Alfred Cove. This new facility would feature a Wavegarden wave generator, with a “cove” open water surf sports lagoon that can create waves over 2m tall and 150m long. The “Cove” will have separate zones with varying difficulty levels, whilst the facility will also offer both aquatic and non-aquatic services. Revenue will be generated from surf sessions and lessons, equipment, apparel, functions/events, group fitness sessions, training and coaching for athletes, food and drink, and other tourism activities.

ECONOMIC IMPACT ASSESSMENT

Construction Phase Impacts

URBNSURF Perth is estimated to have a total construction cost of \$28.0 million, of which it is estimated that approximately 20% will directly impact on the local economy.

Overall, the construction phase is estimated to support:

- \$18.6 million worth of additional output for City of Melville businesses and industries (including \$5.8 million in direct impacts).
- \$8.7 million contribution to the City of Melville’s Gross Regional Product (GRP) (of which \$2.2 million is through direct impacts).
- \$5.2 million in incomes and salaries paid to City of Melville households (including \$1.1 million paid through direct construction activity).
- Employment totalling 51 FTE jobs (including 11 direct jobs FTE).

Operations Phase Impacts

Once operational, economic impacts of URBNSURF Perth will be supported through the revenue generated by patrons of the precinct. These patrons may be Surf Session Participants or General Admission. Patrons’ expenditure within the precinct including surf session fees, equipment hire, food and beverage, and retail have been modelled. Three patronage scenarios were modelled to provide guidance on the degree of economic impact which may be supported by the precinct, these are:

- **Scenario 1: 200,000 Entries** comprised of 150,000 Surf Session Participants and 50,000 General Admissions
- **Scenario 2: 300,000 Entries** comprised of 250,000 Surf Session Participants and 50,000 General Admissions
- **Scenario 3: 400,000 Entries** comprised of 350,000 Surf Session Participants and 50,000 General Admissions

Under Scenario 2 (300,000 entries), this level of patronage is estimated to support (per annum):

- \$25.3 million worth of additional output (including \$10.3 million in direct impacts).
- \$11.9 million contribution to GRP (including \$4.0 million through direct impacts).
- \$7.6 million in incomes and salaries paid to households (including \$2.7 million in direct incomes).
- Employment totaling 122 FTE jobs (including 53 direct jobs).

SOCIAL IMPACT ASSESSMENT

In addition to the economic impacts of the project, the precinct is likely to provide social benefits to the City of Melville. These include:

- Increased employment of unskilled and older/youth labour;
- Increased tourism visitation to other areas within the City of Melville;
- Increased local participation in sport and sport development opportunities;
- Improved place activation and more diverse local use of the space;
- Improved community involvement.

Parking and traffic impacts will be addressed through the approval process but are expected to be manageable – the project provides on-site parking and the precinct is on a major road and accessible by several public transport routes. There is no net loss to playing fields at Tompkins Park. The project will cause disruption to the existing members and users of the Melville Bowling Club, however some change to existing arrangements with bowling clubs in the City of Melville has previously been addressed and it is anticipated the Melville Bowling Club will relocate to a new Tompkins Park Hub.

CITY OF MELVILLE IMPACTS

Ground Lease

In addition to the modelled economic benefits of URBNSURF Perth to the City of Melville economy, the project also presents a revenue benefit to the City itself. Currently, the majority of the Tompkins Park Alfred Cove site is leased to the Melville Bowling Club at a fee of \$700 per annum. Building maintenance is undertaken by the City and a subsidy to the Bowling Club of \$400 per member is in place. The proposed URBNSURF Perth lease agreement is proposed to be \$700,000 per annum. This presents a significant financial benefit for the City of Melville.

- Total accumulated ground lease excluding rent reviews for the initial lease term is \$20,300,000. At a discount rate of 5% this has a net present value of \$9.613 million.
- If the proposed ten year plus ten year options were exercised by the Wave Park Group, then the accumulated ground lease excluding rent reviews for the whole lease term would be \$34,300,000. At a discount rate of 5% this has a net present value of \$11.536 million.

Policy

The wave park proposal generally is consistent with City of Melville strategic objectives, as contained in the City's Strategic Community Plan and the City's Corporate Plan. It particularly aligns with strategies identified in the Plan to address Priority 1 and Priority 2 of that Plan, notably:

- Creating greater revenue from our current and potential land, property and facility holdings
- Optimise facilities to achieve 'fit for use' facilities for current and future beneficiaries.

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1. INTRODUCTION

1.1 BACKGROUND

The City of Melville has received a proposal to develop URBNSURF Perth at Tompkins Park Alfred Cove. The site is currently the location of the Melville Bowls Club which is being relocated within the City. To assist in its assessment of the development, an economic impact assessment is required to determine the economic and social impacts of the development on the City of Melville.

1.2 PURPOSE OF THE STUDY

The purpose of this report is to provide an assessment of the economic impacts of the construction and operations phases of the development. A summary of the social impacts associated with the operational phase of the project has also been developed.

1.3 APPROACH

Input-Output (I-O) modelling has been used in this study to assess the economic impact of the construction and operational phases of the wave park. A description of the I-O model used and limitations is provided in **Appendix A**. Assumptions and model drivers used in conducting the economic modelling are outlined in section 3.

2. PROJECT OVERVIEW

2.1 PROJECT DESCRIPTION

Wave Park Group Pty Ltd has applied to develop a surf sports, recreation, and leisure facility, called URBNSURF Perth, on the Melville Bowling Club Site at Tompkins Park Alfred Cove. This new facility would feature a Wavegarden wave generator, with a “cove” open water surf sports lagoon that can create waves over 2m tall and 150m long. The “Cove” will have separate zones with varying difficulty levels, whilst the facility will also offer both aquatic and non-aquatic services. Revenue will be generated from surf sessions and lessons, equipment, apparel, functions/events, group fitness sessions, training and coaching for athletes, food and drink, and other tourism activities.

The Wavegarden open water lagoon will be designed to deliver authentic waves that provide a better surfing experience than can be had on the Perth coastline. The “Peak” zone will cater to those wanting this high-quality experience, whilst the “Bay” zone is for less experienced guests who wish to learn. The maximum capacity for the lagoon is 84 people/hour (36 in the former and 48 in the latter). Current projections indicate annual surfing lessons could be 250,000 patrons and general admission of 50,000 patrons per annum (Wave Park Group 2016b). AEC has reviewed these projections and other supporting data, including sport participation rates in WA and Australia overall, the results of an independently administered survey of potential participants and the experience of other centres and considers them to be reasonable. Sensitivity analysis for higher and lower patronage is contained in the analysis in section 3 below.

Other sports facilities to be provided at URBNSURF Perth will include a plunge pool, skate course, and a mountain bike pump track. There will also be an arrivals centre, changing rooms, a shop, equipment storage space, meeting rooms, outdoor event space, and a café. The buildings are projected to cover 2,000m². The facility overall is designed to provide more amenities for the community than the current Melville Bowling Club.

The wave park is projected to help meet the City’s strategic goals including:

- Increased sport diversity and relevance.
- Increased tourism.
- More sport development opportunities.
- Better place activation.
- Community involvement.
- Increased local employment, particularly for the youth.
- Secured income stream from the long-term commercial lease to promote a sustainable economy.

2.2 CITY OF MELVILLE SOCIO-ECONOMIC OVERVIEW

The City of Melville is located south of the Perth CBD along the Swan river. The City of Melville recorded a population of 106,655 people in 2015 (ABS, 2016a). Local population growth has been relatively consistent with Perth SD and Western Australia. Melville’s population is older than both comparison regions with an average age of 40.2 years. However, the region has a high proportion of persons aged 20-24 years.

Since 2006-07, the City of Melville economy has recorded an average annual expansion of 2.7%, reaching \$4.5 billion in 2014-15 (AEC, unpublished). In the latest year, the economy contracted by nearly 5%. The key sectors (in terms of Gross Value Add contributions) were healthcare and social assistance; construction; retail trade; professional, scientific, and technical services; and manufacturing (AEC, unpublished). Construction was one of the top five growth sectors, whilst professional, scientific, and technical services were one of the top detractors from growth. The Arts and Recreation Services sector supported 1.1% of local Gross Value Add in 2014-15.

The unemployment rate in the City of Melville has increased by 0.5% over the past five years but has remained stable in the last quarter (Department of Employment, 2016). In September 2016, the unemployment rate for the region was 2.9%. In 2011, youth unemployment was considerably higher than unemployment for other age cohorts

with 9.0% of persons aged 15 to 24 years unemployed and looking for work, compared to 3.0% of persons aged 25 to 64 years (ABS, 2012).

3. ECONOMIC IMPACT ASSESSMENT

3.1 APPROACH

Economic modelling in this section estimates the economic activity supported by the construction and operational activity of the project. Input-Output modelling is used to examine the direct and flow-on¹ activity expected to be supported within the City of Melville economy. A description of the Input-Output modelling framework used is provided in **Appendix A**.

Input-output modelling describes economic activity by examining four types of impacts:

- **Output:** Refers to the gross value of goods and services transacted, including the costs of goods and services used in the development and provision of the final product. Output typically overstates the economic impacts as it counts all goods and services used in one stage of production as an input to later stages of production, hence counting their contribution more than once.
- **Gross product:** Refers to the value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g., Gross Regional Product) defines the true net contribution and is subsequently the preferred measure for assessing economic impacts.
- **Income:** Measures the level of wages and salaries paid to employees of the industry under consideration and to other industries benefiting from the project.
- **Employment:** Refers to the part-time and full-time employment positions generated by the economic stimulus, both directly and indirectly through flow-on activity, expressed in full time equivalent (FTE) positions².

3.2 DRIVERS & ASSUMPTIONS USED IN MODELLING

3.2.1 Construction Phase

The proposed URBNSURF Perth development is estimated to cost approximately \$28.0 million to construct.

For modelling purposes, construction costs were allocated to Australian and New Zealand Standard Industrial Classification (ANZSIC) industries. This breakdown was developed based on assumptions by AEC regarding the most appropriate ANZSIC industries likely to be required in the development of the URBNSURF Perth, by applying an estimated proportion of development cost to each industry.

Total expenditure allocation by ANZSIC industry is presented in Table 3.1.

Table 3.1. Construction ANZSIC Allocation

ANZSIC	Activity Description	Estimated Proportion of Construction Cost	Modelled Value \$M
Heavy and Civil Engineering Construction	Construction of URBNSURF Perth and associated infrastructure (parking etc.)	85%	\$23.8
Construction Services	Land clearing, plumbing etc.	10%	\$2.8
Professional, Scientific and Technical Services	Design, consultancy fees etc.	5%	\$1.4
Total		100%	\$28.0

Source: Wave Park Group (2016a), AEC

¹ Both Type I and Type II flow-on impacts have been presented in this report. Refer to **Appendix A** for a description of each type of flow-on impact.

² Where one FTE is equivalent to one person working full time for a period of one year.

Of the above capital outlay, not all activity will be undertaken within the City of Melville economy. For example, the majority of professional, scientific and technical services activities are likely to be sourced from outside the local economy.

The following table outlines assumptions used in the modelling to identify where relevant activity is anticipated to occur.

Table 3.2: Location of Construction Phase Activity by Industry

Industry	% Local
Heavy and Civil Engineering Construction	100%
Construction Services	100%
Professional, Scientific and Technical Services	25%

Source: AEC.

In interpreting the above table, it is important to recognise the location of where activity occurs can differ from where the labour or services used to undertake the activity are sourced from. For example, construction activity will (effectively) all occur on site. However, it is likely that some labour may be required that is not available in the City of Melville, and would, therefore, be sourced from other areas.

The following table outlines the assumptions used in the modelling regarding the location where goods and services are sourced. It is estimated that expenditure on the construction of the URBNSURF Perth development is consistent (overall) with this expenditure profile.

Table 3.3. Source of Construction Phase Activity by Industry

Industry	% Local
Heavy and Civil Engineering Construction	20%
Construction Services	25%
Professional, Scientific and Technical Services	25%

Source: AEC.

In undertaking economic modelling, the direct activity associated with the construction phase is based on where activity occurs (Table 3.2) rather than strictly where labour for these services is sourced from (Table 3.3). However, the amount of activity that is retained in the City of Melville economy is best considered in terms of where labour, goods and services are sourced, rather than where the activities they undertake are located. This refers to a 'retention' of incomes and profits within an economy and reflects that labour and companies sourced from outside the City of Melville economy are more likely to spend incomes earned within their local area than within the City of Melville.

For the purposes of modelling, it has been assumed construction companies and sub-contractors sourced from outside the City of Melville will contribute approximately one quarter (25%) of the level of Type I (production induced) flow-on activity within the economy that a locally sourced company does, and approximately 10% of Type II (consumption induced) flow-on activity. This reflects that construction companies working on site but sourced from outside the City of Melville will contribute to local supply chains in terms of sourcing some goods and services they require locally (Type I), as well as spending some wages and salaries locally on items such as food, drink and accommodation.

The final drivers for the model are outlined in Table 3.4, below.

Table 3.4. Economic Model Drivers, City of Melville, \$m

Sector	Value (\$m)
Heavy and Civil Engineering Construction	\$4.76
Construction Services	\$0.70
Professional, Scientific and Technical Services	\$0.35

Source: AEC

3.2.2 Operational Phase

Once operational, URBNSURF Perth is expected to generate economic activity within the City of Melville, primarily through operation of the facility. Revenue generation by the facility is estimated to be sourced from several aspects of the precinct, including surf fees (e.g. entry fees and lesson fees), food and beverage sales and retail sales. Due to the unique nature of the precinct, all revenues associated with surfing and general admission entry to URBNSURF Perth have been modelled as economic benefits for the City of Melville, including expenditure of both patrons that reside in the City of Melville and those that visit from outside the City of Melville. The expenditure of locals at the facility has been included as it is assumed that locals who might undertake surfing activities at URBNSURF Perth would otherwise undertake these activities in other local government areas if the development does not go ahead, as this would be the only facility available in the City of Melville providing this opportunity.

The precinct also includes a function space, which will generate revenues and activity. However, revenues associated with functions at the precinct have been excluded from the modelling as it has been conservatively assumed this revenue has the potential to be generated at other function centres within the City of Melville (thus potentially representing a transfer of activity within the local government area).

The majority of users of the URBNSURF facility, by a considerable margin, are likely to come from outside of the City of Melville. There is also a strong likelihood that non-residents of the City of Melville who come into the City specifically to use the precinct may also undertake expenditure elsewhere in the City (e.g. go shopping or buy food and drink at businesses in the City of Melville other than URBNSURF Perth). However, there is insufficient data available to quantify the level of activity that may be captured by these visitors, and to provide a conservative estimate of the economic benefit of URBNSURF Perth, this expenditure has not been included in the assessment.

To provide an estimate of the economic impact of revenues directly generated by URBNSURF Perth users (excluding functions attendees), patrons have been classified into two groups:

- **Surf Session Participants:** Patrons who participate in a surf session during their entry at URBNSURF Perth. It has been assumed 50% of these patrons participate in a 30-minute session (at a fee of \$25) and 50% of these patrons participate in a 1-hour session (at a fee of \$40). A nominal fee of \$2.50 has been applied to these patrons for equipment hire (as many of these participants are likely to own their own wetsuit and surfboard).
- **General Admissions:** Patrons who enter URBNSURF Perth for free as a spectator or to enjoy the food and beverage and retail offerings of the precinct.

To provide a guide to the range of economic impacts potentially supported by the operational phase of the project, three annual patronage scenarios have been modelled:

- **Scenario 1: 200,000 Entries** comprised of 150,000 Surf Session Participants and 50,000 General Admissions
- **Scenario 2: 300,000 Entries** comprised of 250,000 Surf Session Participants and 50,000 General Admissions
- **Scenario 3: 400,000 Entries** comprised of 350,000 Surf Session Participants and 50,000 General Admissions

It has been assumed Scenario 2 is the most likely outcome for URBNSURF Perth, with Scenario 1 considered a conservative estimate and Scenario 3 an optimistic estimate for the facility.

For the purposes of modelling, it has been assumed some additional expenditure on food and beverage and retail is undertaken by patrons of the URBNSURF Perth facility. An average expenditure of \$2.50 on each type of expenditure (food and beverage and retail) has been applied. This is considered a conservative estimate.

The following table provides an overview of the modelled revenues associated with each patronage scenario.

Table 3.5. Annual Operational Drivers, City of Melville

Indicator	Scenario 1 (200,000 Entries)	Scenario 2 (300,000 Entries)	Scenario 3 (400,000 Entries)
Surf Session Participants (No.)	150,000	250,000	350,000
General Admission (No.)	50,000	50,000	50,000
Surf Session Fees (\$m)	\$4.88	\$8.13	\$11.38
Equipment Hire (\$m)	\$0.38	\$0.63	\$0.88
Retail Expenditure (\$m)	\$0.50	\$0.75	\$1.00
Food and Beverage (\$m)	\$0.50	\$0.75	\$1.00
Total Revenue (\$m)	\$6.25	\$10.25	\$14.25

Source: AEC

3.3 ECONOMIC IMPACT ASSESSMENT

3.3.1 Construction

The construction phase of the URBNSURF Perth development is expected to deliver economic benefits for the City of Melville economy.

Overall, the construction phase is estimated to support:

- \$18.6 million worth of additional output for City of Melville businesses and industries (including \$5.8 million in direct impacts).
- \$8.7 million contribution to the City of Melville's Gross Regional Product (GRP) (of which \$2.2 million is through direct impacts).
- \$5.2 million in incomes and salaries paid to City of Melville households (including \$1.1 million paid through direct construction activity).
- Employment totalling 51 FTE jobs (including 11 direct jobs).

Table 3.6: Construction Phase Impacts (\$M), City of Melville

Impact	Output (\$M)	Gross Regional Product (\$M)	Incomes (\$M)	Employment (FTEs)
Direct	\$5.8	\$2.2	\$1.1	11
Type I Flow-On	\$6.6	\$3.0	\$1.9	17
Type II Flow-On	\$6.2	\$3.4	\$2.1	23
Total	\$18.6	\$8.7	\$5.2	51

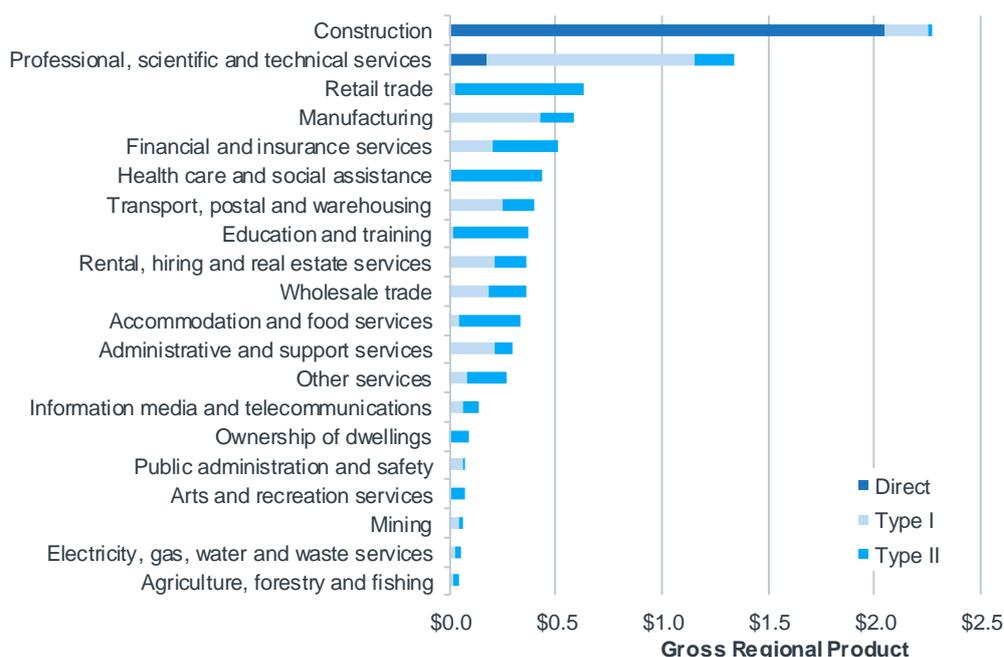
Note: Figures may not add due to rounding.

Source: AEC

Major benefiting industries in terms of GRP supported in the City of Melville during the construction phase include:

- Construction (combined direct and flow-on GRP \$2.3 million).
- Professional, scientific and technical services (combined direct and flow-on GRP \$1.3 million).
- Retail trade (flow-on GRP totalling \$0.6 million).

Figure 3.1: Construction GRP Impacts by Industry (\$M), City of Melville



Source: AEC

3.3.2 Operations

Once operational, URBNSURF Perth is estimated to generate ongoing economic benefits for the City of Melville under all the patronage scenarios modelled. Under Scenario 2 (300,000 entries), this economic activity is expected to support, per annum:

- \$25.3 million worth of additional output (including \$10.3 million in direct impacts).
- \$11.9 million contribution to GRP (including \$4.0 million through direct impacts).
- \$7.6 million in incomes and salaries paid to households (including \$2.7 million in direct incomes).
- Employment totaling 122 FTE jobs (including 53 direct jobs).

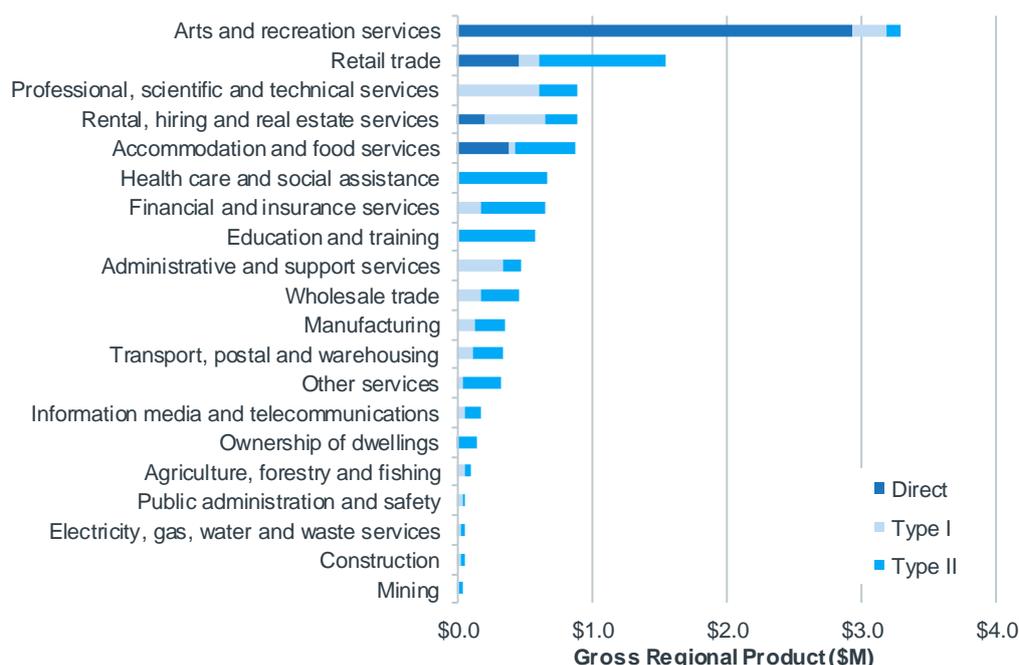
Table 3.7: Annual Operational Phase Impacts (\$M), Scenario 2, City of Melville

Impact	Output (\$M)	Gross Regional Product (\$M)	Incomes (\$M)	Employment (FTEs)
Direct	\$10.3	\$4.0	\$2.7	53
Type I Flow-On	\$5.5	\$2.7	\$1.6	21
Type II Flow-On	\$9.5	\$5.3	\$3.3	48
Total	\$25.3	\$11.9	\$7.6	122

Note: Figures may not add due to rounding.
Source: AEC

Major benefiting industries in terms of GRP supported by the URBNSURF Perth operational activities include:

- Arts and recreation services (combined direct and flow-on GRP totalling \$3.3 million).
- Retail trade (flow-on GRP \$1.5 million).
- Professional, scientific and technical services (combined direct and flow-on GRP \$0.9 million).

Figure 3.2: Annual Operations GRP Impacts by Industry (\$M), Scenario 2, City of Melville


Source: AEC

Economic benefits for each of the modelled patronage scenarios for URBNSURF Perth are outlined in the table below. Overall, per annum, once operational the precinct has the potential to support (directly and indirectly) in the City of Melville an additional:

- \$15.4 million to \$35.1 million worth of additional output.
- \$7.3 million to \$16.6 million contribution to GRP.
- \$4.6 million to \$10.5 million in incomes and salaries paid to households.
- Employment totaling between 74 and 169 FTE jobs.

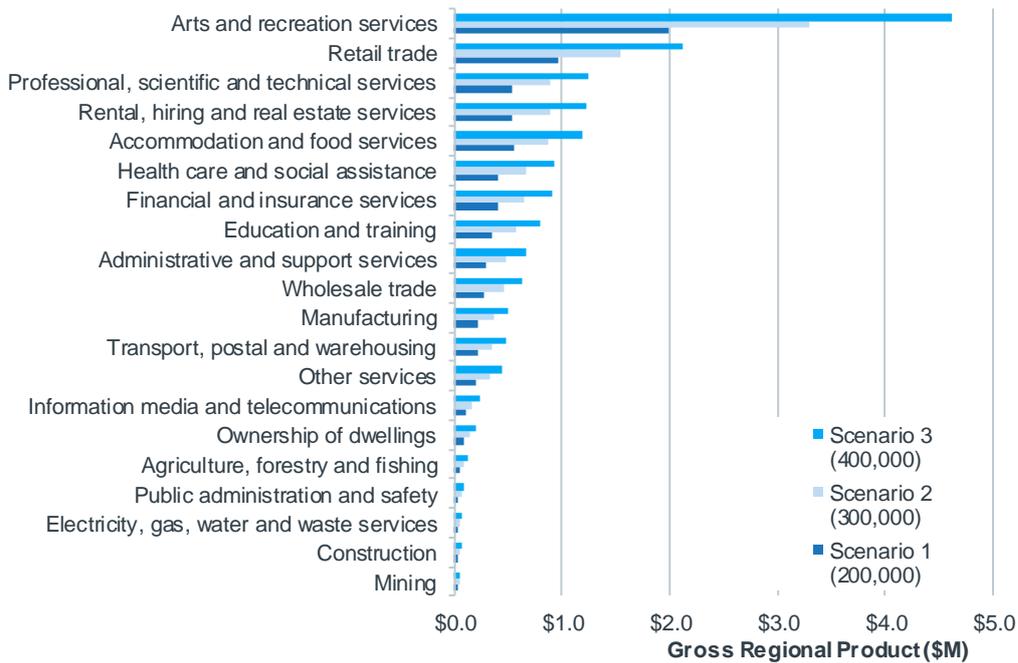
Table 3.8. Annual Operational Impacts, All Scenarios, City of Melville

Impact	Output (\$M)	Gross Regional Product (\$M)	Incomes (\$M)	Employment (FTEs)
Scenario 1 - 200,000 Entries				
Direct	\$6.3	\$2.4	\$1.6	33
Type I Flow-On	\$3.4	\$1.6	\$1.0	13
Type II Flow-On	\$5.8	\$3.2	\$2.0	29
Total	\$15.4	\$7.3	\$4.6	74
Scenario 2 - 300,000 Entries				
Direct	\$10.3	\$4.0	\$2.7	53
Type I Flow-On	\$5.5	\$2.7	\$1.6	21
Type II Flow-On	\$9.5	\$5.3	\$3.3	48
Total	\$25.3	\$11.9	\$7.6	122
Scenario 3 - 400,000 Entries				
Direct	\$14.3	\$5.5	\$3.7	74
Type I Flow-On	\$7.7	\$3.7	\$2.2	29
Type II Flow-On	\$13.2	\$7.3	\$4.6	66
Total	\$35.1	\$16.6	\$10.5	169

Note: Figures may not add due to rounding.
Source: AEC

Major benefiting industries in terms of GRP supported by the URBNSURF Perth operational activities are outlined in Figure 3.3.

Figure 3.3. Annual Operations GRP Impacts by Industry (\$M), All Scenarios, City of Melville



Source: AEC

Ground Lease

In addition to the modelled economic benefits of URBNSURF Perth to the City of Melville economy, the project also presents a revenue benefit to the City itself. Currently, the majority of the Tompkins Park Alfred Cove site is leased to the Melville Bowling Club at a fee of \$700 per annum. Building maintenance is undertaken by the City and a subsidy to the Bowling Club of \$400 per member is in place (Wave Park Group, 2016b). It is anticipated the Melville Bowling Club will relocate to Tompkins Park Hub along with the Mount Pleasant Bowling Club (City of Melville, 2016).

The proposed URBNSURF Perth lease agreement is proposed to be \$700,000 per annum. This presents a significant financial benefit for the City of Melville.

Total accumulated ground lease excluding rent reviews for the initial lease term is \$20,300,000. At a discount rate of 5% this has a net present value of \$9.613 million.

If the proposed ten year plus ten year options were exercised by the Wave Park Group then the accumulated ground lease excluding rent reviews for the whole lease term would be \$34,300,000. At a discount rate of 5% this has a net present value of \$11.536 million.

4. SOCIAL IMPACT ASSESSMENT

In addition to the economic impacts of the project (outlined in Chapter 3), the precinct is likely to provide social benefits to the City of Melville. These include:

- **Increased employment of unskilled and older/youth labour:** Labour directly associated with the development are anticipated to be unskilled and of a casual and part-time nature, providing opportunities for youth and older labour within the region. In 2011, youth unemployment in the City of Melville was higher than unemployment rates for other age groups. Approximately 6.1% of persons aged 15 to 19 years and 5.8% of persons aged 20-24 years were unemployed and looking for work compared to an average of 2.2% of all persons aged from 25 to 74 years (ABS, 2012).
- **Increased tourism visitation to other areas within the City of Melville:** The majority of users of the URBNSURF facility, by a considerable margin, are likely to come from outside of the City of Melville. It is likely to become a key attraction for tourists within the City. Increased numbers of visitors accessing the region has the potential to increase visitation of other sites within the region and repeat visitation in future years.
- **Increased local participation in sport:** It is likely that local residents who would not normally participate in surfing, may visit URBNSURF Perth due to its proximity to their place of residence. Increased participation in sports can potentially improve local mental and physical health outcomes. Repeat participation in surfing activities would be required to achieve a noticeable impact on local health outcomes. Health statistics for the City of Melville suggest the region enjoys better health than residents of the broader Perth SD and Western Australia, with relatively high numbers of residents indicating they have 'very good or excellent' self-assessed health in 2007-08 (PHIDU, 2016).
- **Improved place activation:** The wave park development will add to the existing features and attractors available at Tompkins Park, providing an expanded range of recreation, leisure and hospitality opportunities.
- **Community involvement:** The broad nature of the precinct (including food and beverage and retail) as well as the wave park itself is likely to appeal to a broad range of local residents. It is suggested that the facility is designed to become a meeting and gathering place for broad sections of the City of Melville community. This is expected to improve local social connectivity in the region as a wider range of local residents interact within the precinct. The proposal to include a surf safety training program in collaboration with Surf Life Saving (WA) and the incorporation of interschool sports carnivals will further strengthen community ties.

The current project concept provides for 215 car bays, exceeding the projected 180 bays required to meet demand from patrons (Wave Park, 2016a). The precinct is on a major road and accessible by several major public transport routes (Wave Park, 2016a) which will reduce the traffic impacts of the precincts for surrounding road infrastructure. Parking and traffic impacts will be addressed through the approval process.

There is no net loss to playing fields at Tompkins Park. The project will cause disruption to the existing members and users of the Melville Bowling Club, however some change to existing arrangements with bowling clubs in the City of Melville has previously been addressed and considered by the City in the form of the 2016 Lawn Bowls Strategy. That strategy anticipates the Melville Bowling Club will relocate to a new Tompkins Park Hub along with the Mount Pleasant Bowling Club.

The wave park proposal generally is consistent with City of Melville strategic objectives, as contained in the City's Strategic Community Plan and the City's Corporate Plan. It particularly aligns with strategies identified in the Plan to address Priority 1 and Priority 2 of that Plan:

Priority 1: *Restricted current revenue base and increasing/changing service demands impacts on rates*

- *Strategy 2 for Priority 1. Creating greater revenue from our current and potential land, property and facility holdings*

Priority 2: *Meeting the demand to provide fit for use/ appropriate infrastructure into the future*

- *Strategy 1 for Priority 2: Optimise facilities to achieve 'fit for use' facilities for current and future beneficiaries. Includes amalgamation of like groups into hubs and shared use of facilities (private sector, State Govt., other LG and community groups).*

REFERENCES

- ABS (2007). *Census of Population and Housing, 2006*. Cat. No. 2068.0. ABS, Canberra
- ABS (2012). *Census of Population and Housing Data, 2011*. Cat. No. 2001.0, ABS, Canberra.
- ABS (2016a). *Regional Population Growth, Australia, 2014*. Cat. No. 3218.0. ABS, Canberra.
- ABS (2016b). *Australian National Accounts: Input-Output Tables – Electronic Publication, 2013-14 Tables*. Cat. No. 5209.0.55.001, ABS, Canberra.
- ABS (2016c). *Consumer Price Index, Australia*. Cat. No. 6401.0, ABS, Canberra.
- City of Melville (2016). *Bowls Strategy Aims to Preserve Sport*. Available from:
<http://www.melvillecity.com.au/news-and-events/news/bowls-strategy-aims-to-preserve-sport>. Last accessed: 15 March 2017.
- Department of Employment (2016). *Small Area Labour Markets, September Quarter 2016*. Department of Employment, Canberra
- Public Health Information Development Unit (2016). *Social Health Atlas of Australia*. Public Health Development Unit, Adelaide
- Wave Park Group (2016a). *URBNSURF Perth*. Detailed Proposal, Prepared for the City of Melville. Wave Park Group, Perth (Commercial-in-confidence)
- Wave Park Group (2016b). *Wave Park Group – Surf Sports Recreation and Leisure Facility Tompkins Park Business Case*. Wave Park Group, Perth, (City of Melville report)
- West, G. R. (1993). *User's Guide, Input-Output Analysis for Practitioners an Interactive Input-Output Software Package Version 7.1*. Department of Economics. University of Queensland, 1993.

APPENDIX A: INPUT-OUTPUT METHODOLOGY

INPUT-OUTPUT MODEL OVERVIEW

Input-Output analysis demonstrates inter-industry relationships in an economy, depicting how the output of one industry is purchased by other industries, households, the government and external parties (i.e. exports), as well as expenditure on other factors of production such as labour, capital and imports. Input-Output analysis shows the direct and indirect (flow-on) effects of one sector on other sectors and the general economy. As such, Input-Output modelling can be used to demonstrate the economic contribution of a sector on the overall economy and how much the economy relies on this sector or to examine a change in final demand of any one sector and the resultant change in activity of its supporting sectors.

The economic contribution can be traced through the economic system via:

- **Direct impacts**, which are the first round of effects from direct operational expenditure on goods and services.
- **Flow-on impacts**, which comprise the second and subsequent round effects of increased purchases by suppliers in response to increased sales. Flow-on impacts can be disaggregated to:
 - **Industry Support Effects** (Type I), which represent the production induced support activity as a result of additional expenditure by the industry experiencing the stimulus on goods and services in the intermediate usage quadrant, and subsequent round effects of increased purchases by suppliers in response to increased sales.
 - **Household Consumption Effects** (Type II), which represent the consumption induced activity from additional household expenditure on goods and services resulting from additional wages and salaries being paid within the economic system.

These effects can be identified through the examination of four types of impacts:

- **Output:** Refers to the gross value of goods and services transacted, including the costs of goods and services used in the development and provision of the final product. Output typically overstates the economic impacts as it counts all goods and services used in one stage of production as an input to later stages of production, hence counting their contribution more than once.
- **Gross product:** Refers to the value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g., Gross State Product) defines the true net contribution and is subsequently the preferred measure for assessing economic impacts.
- **Income:** Measures the level of wages and salaries paid to employees of the industry under consideration and to other industries benefiting from the project.
- **Employment:** Refers to the part-time and full-time employment positions generated by the economic shock, both directly and indirectly through flow-on activity, and is expressed in terms of full-time equivalent (FTE) positions.

Input-Output multipliers can be derived from open (Type I) Input-Output models or closed (Type II) models. Open models show the direct effects of spending in a particular industry as well as the indirect or flow-on (industrial support) effects of additional activities undertaken by industries increasing their activity in response to the direct spending.

Closed models re-circulate the labour income earned as a result of the initial spending through other industry and commodity groups to estimate consumption induced effects (or impacts from increased household consumption).

MODEL DEVELOPMENT

Multipliers used in this assessment are derived from sub-regional transaction tables developed specifically for this project. The process of developing a sub-regional transaction table involves developing regional estimates of gross production and purchasing patterns based on a parent table, in this case, the 2013-14 Australian transaction table (ABS, 2016b).

Estimates of gross production (by industry) in the study area were developed based on the percent contribution to employment (by place of work) of the study area to the Australian economy (ABS, 2012), and applied to Australian gross output identified in the 2013-14 Australian table.

Industry purchasing patterns within the study area were estimated using a process of cross-industry location quotients and demand-supply pool production functions as described in West (1993).

Where appropriate, values were rebased from 2013-14 (as used in the Australian National Input-Output transaction tables) to 2016 values using the Consumer Price Index (ABS, 2016c).

MODELLING ASSUMPTIONS

The key assumptions and limitations of Input-Output analysis include:

- **Lack of supply-side constraints:** The most significant limitation of economic impact analysis using Input-Output multipliers is the implicit assumption that the economy has no supply-side constraints, so the supply of each good is perfectly elastic. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.
- **Fixed prices:** Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using Input-Output multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. The system is in equilibrium at given prices, and prices are assumed to be unaffected by policy and any crowding out effects are not captured. This is not the case in an economic system subject to external influences.
- **Fixed ratios for intermediate inputs and production** (linear production function): Economic impact analysis using Input-Output multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. That is, the input function is generally assumed linear and homogenous of degree one (which implies constant returns to scale and no substitution between inputs). As such, impact analysis using Input-Output multipliers can be seen to describe average effects, not marginal effects. For example, increased demand for a product is assumed to imply an equal increase in production for that product. However, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount. Further, it is assumed each commodity (or group of commodities) is supplied by a single industry or sector of production. This implies there is only one method used to produce each commodity and that each sector has only one primary output.
- **No allowance for economies of scope:** The total effect of carrying on several types of production is the sum of the separate effects. This rules out external economies and diseconomies and is known simply as the “additivity assumption”. This generally does not reflect real world operations.
- **No allowance for purchasers’ marginal responses to change:** Economic impact analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.
- **Absence of budget constraints:** Assessments of economic impacts using multipliers that consider consumption induced effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget constraints.

Despite these limitations, Input-Output techniques provide a solid approach for taking account of the inter-relationships between the various sectors of the economy in the short-term and provide useful insight into the quantum of final demand for goods and services, both directly and indirectly, likely to be generated by a project.

In addition to the general limitations of Input-Output Analysis, there are two other factors that need to be considered when assessing the outputs of sub-regional transaction table developed using this approach, namely:

- It is assumed the sub-region has similar technology and demand/ consumption patterns as the parent (Australia) table (e.g. the ratio of employee compensation to employees for each industry is held constant).

- Intra-regional cross-industry purchasing patterns for a given sector vary from the national tables depending on the prominence of the sector in the regional economy compared to its input sectors. Typically, sectors that are more prominent in the region (compared to the national economy) will be assessed as purchasing a higher proportion of imports from input sectors than at the national level, and vice versa.

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